

Application No. 09/557,696

9/ 09/311,506, now U.S. Patent 6,394,494, entitled "Metal Vanadium Oxide Particles," incorporated herein by reference.

At page 45, lines 11-29, please replace the paragraph with the following.

1 The production of silicon oxide nanoparticles is described in copending and commonly assigned U.S. Patent Application Serial Number 09/085,514 to Kumar et al., entitled "Silicon Oxide Particles," incorporated herein by reference. This patent application describes the production of amorphous SiO_2 . The production of titanium oxide nanoparticles and crystalline silicon dioxide nanoparticles is described in copending and commonly assigned, U.S. Patent Application Serial Number 09/123,255 now U.S. Patent 6,387,531 to Bi et al., entitled "Metal (Silicon) Oxide/Carbon Composites," incorporated herein by reference. In particular, this application describes the production of anatase and rutile TiO_2 . The production of aluminum oxide nanoparticles is described in copending and commonly assigned, U.S. Patent Application Serial Number 09/136,483 to Kumar et al., entitled "Aluminum Oxide Particles," incorporated herein by reference. In particular, this application disclosed the production of $\gamma\text{-Al}_2\text{O}_3$.

At page 46, lines 7-20, please replace the paragraph with the following.

3 The production of iron, iron oxide and iron carbide is described in a publication by Bi et al., entitled "Nanocrystalline $\alpha\text{-Fe}$, Fe_3C , and Fe_7C_3 produced by CO_2 laser pyrolysis," J. Mater. Res. Vol. 8, No. 7 1666-1674 (July 1993), incorporated herein by reference. The production of nanoparticles of silver metal is described in copending and commonly assigned U.S. Patent Application Serial Number 09/311,506, now U.S. Patent 6,394,494 to Reitz et al., entitled "Metal Vanadium Oxide Particles," incorporated herein by reference. Nanoscale carbon particles produced by laser pyrolysis is described in a reference by Bi et al., entitled "Nanoscale carbon blacks produced by CO_2 laser pyrolysis," J. Mater. Res. Vol. 10, No. 11, 2875-2884 (Nov. 1995), incorporated herein by reference.

Application No. 09/557,696

At page 47, lines 3-20, please replace the paragraph with the following.

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The production of ternary nanoparticles of aluminum silicate and aluminum titanate can be performed by laser pyrolysis following procedures similar to the production of silver vanadium oxide nanoparticles described in copending and commonly assigned U.S. Patent Application Serial Number 09/311,506, now U.S. Patent 6,394,494 to Reitz et al., entitled "Metal Vanadium Oxide Particles," incorporated herein by reference. Suitable precursors for the production of aluminum silicate include, for vapor delivery, a mixture of aluminum chloride (AlCl_3) and silicon tetrachloride (SiCl_4) and, for aerosol delivery, a mixture of tetra(N-butoxy) silane and aluminum isopropoxide ($\text{Al}(\text{OCH}(\text{CH}_3)_2)_3$). Similarly, suitable precursors for the production of aluminum titanate include, for aerosol delivery, a mixture of aluminum nitrate ($\text{Al}(\text{NO}_3)_3$) and titanium dioxide (TiO_2) powder dissolved in sulfuric acid or a mixture of aluminum isopropoxide and titanium isopropoxide ($\text{Ti}(\text{OCH}(\text{CH}_3)_2)_4$).

In the Claims

Please substitute the following amended claims for those currently pending:

1. (Three Times Amended) A method for obtaining a plurality of quantities of compositions with an apparatus comprising a plurality of collectors and a nozzle comprising a reactant inlet, the method comprising:
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- reacting a first quantity of fluid reactants within a fluid stream at least a portion of which is from the reactant inlet to form a first quantity of product composition;
- collecting the first quantity of product composition from the fluid stream using a first collector;
- moving the nozzle relative to the first collector and second collector following completion of the collection of the first quantity of product composition;
- following completion of the collection of the first quantity of product composition, reacting a second quantity of fluid reactants within the fluid stream at least a portion of which is from the reactant inlet to form a second quantity of
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